Avian Hepatitis E Virus, Vaccines and Methods of Protecting Against Avian Hepatitis-Splenomegaly Syndrome and Mammalian Hepatitis E

Sub. A2

ABSTRACT OF THE DISCLOSURE

The present invention relates to a novel isolated avian hepatitis E virus having a nucleotide sequence set forth in SEQ ID NO:1 or its complementary strand. The invention further concerns immunogenic compositions comprising this new virus or a recombinant products such as the nucleic acid and vaccines that protect an avian or mammalian species from viral infection or hepatitis-splenomegaly syndrome caused by the hepatitis E virus. Also included in the scope of the invention is a method for propagating, inactivating or attenuating a hepatitis E virus comprising inoculating an embryonated chicken egg with a live, pathogenic hepatitis E virus and recovering the virus or serially passing the pathogenic virus through additional embryonated chicken eggs until the virus is rendered inactivated or attenuated. Further, this invention concerns diagnostic reagents for detecting an avian hepatitis E viral infection or diagnosing hepatitis-splenomegaly syndrome in an avian or mammalian species comprising an antibody raised or produced against the immunogenic compositions and antigens such as ORF2 proteins expressed in a baculovirus vector, *E. coli, etc.* The invention additionally encompasses methods for detecting avian HEV nucleic acid sequences using nucleic acid hybridization probes or oligonucleotide primers for polymerase chain reaction (PCR).